PATENT

Docket GE139224

In the Specification

Please substitute the following paragraphs for the corresponding paragraphs being amended:

[0010] Various patents in the prior art disclose typical embodiments of mesh cooling. Further advances in mesh cooling are presently being developed and are found, for example, in U.S. Patent Applications 10/616,023 filed 7/9/03 (now US Patent 6,832,889); 10/692,700 filed 10/24/03; and 10/718,465 filed 11/20/03, all assigned to the present assignee.

[0016] Aft of the leading edge in the suction side of the airfoil is typically found a row of film cooling gill holes for re-initiating the cooling film aft therefrom. And, aft of the leading edge on the pressure side is are also found several rows of film cooling holes for re-initiating the cooling air films downstream therefrom.

[0033] The shield 38 is preferably perforate longitudinally along the leading edge 28 and includes, for example, three longitudinal rows of film cooling holes 50 along the leading edge for film cooling holes thereof. The film cooling holes 50 are arranged closely together in a conventional manner for effecting a showerhead distribution of the film cooling holes for providing a thermally insulating film of cooling air along the airfoil leading edge and aft therefrom along both sides of the airfoil.

[0035] The shield 38 is integrally joined to the nose bridge 36 by one or more two dimensional arrays of mesh pins 52,54 arranged in a two dimensional mesh in the bridge channel 40. In mesh cooling, the pins are arranged in longitudinally offset rows to provide circuitous flow paths flowpaths in the bridge channel between the two walls thereof for increasing heat transfer of the cooling air being channeled therethrough.